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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,026	01/16/2001	Ian Redmond	M-8535-2P US	8054

7590

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EXAMINER

BATTAGLIA, MICHAEL V

ART UNIT

PAPER NUMBER

2652

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/764,026

Applicant(s)

REDMOND ET AL.

Examiner

Michael V. Battaglia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3, 8, 11, 12, 16, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3, 8, 11 and 12 is/are allowed.
- 6) ☒ Claim(s) 16, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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*Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimano et al (hereafter Shimano) (US 5,930,220) in view of Ngoi et al (hereafter Ngoi) (US 6,195,208).

In regard to claim 16, Shimano discloses an optical head apparatus for use in a read/write device comprising: an optical head substrate (Fig. 2, element that element 1 is inherently mounted to or supported by); a light source means (Fig. 2, element 1) for outputting light, positioned with respect to said optical head substrate; and a first optical means (Fig. 2, element 2) for modifying said light, positioned along an optical path from said light source means to an objective means (Fig. 2, element 7). Shimano further discloses that the light source emits an elliptical light beam and implementing the optical head apparatus with a beamshaper for modifying an ellipticity of said light, wherein said beamshaper is positioned in said optical path (Col. 6, lines 27-32 and 41-47). Shimano does not disclose that the optical head apparatus comprises a beamshaper for modifying an ellipticity of said light, said beamshaper positioned in said optical path, wherein a value of a virtual source point of said optical path before said beamshaper is positioned in the optical path is substantially the same as a value of said virtual source point after said beamshaper is positioned in the optical path. It is noted that the first optical element of Shimano has a collimating function.

Ngoi discloses a beamshaper (Figs. 2, 3 and 5, element 5) for modifying an ellipticity of said light, said beamshaper positioned in said optical path, wherein a value of a virtual source point (Figs. 2 and 4, element 1a) of said optical path before said beamshaper is positioned in the optical path is substantially the same as a value of said virtual source point after said beamshaper is positioned in the optical path (Figs. 2, 3 and 5 and Col. 2, lines 2-9 and Col. 5, lines 12-14). It is noted that the virtual source point of Ngoi (Figs. 2 and 4, element 1a) is the same before and after the beamshaper (Figs. 2, 3 and 5, element 5) is positioned in the optical path because the beamshaper does not affect the virtual source point (Figs. 2, 4 and 5). As a result, the virtual source point is the same before and after the beamshaper is positioned in the optical path. Ngoi discloses that the beamshaper is integrated with a first optical element (Fig. 2, elements 4 and 5a) that has a collimating function and that by doing so a reduction in the number of elements needed to shape and collimate the light beam, a decrease in the cost of manufacture, a reduction in weight, miniaturization and reduction in alignment difficulty are provided (Col. 2, lines 26-29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the first optical element of Shimano with the integrated first optical element and beamshaper of Ngoi, the motivation being to provide the optical head apparatus of Shimano with a beamshaper while maintaining the same number of elements, keeping cost of manufacture, size and weight low, and not increasing alignment difficulty.

In regard to claim 19, Ngoi discloses that the beamshaper and first optical element are positioned on a single integral optical element unit (Fig. 3).

In regard to claim 20, Ngoi discloses that the first optical element is a non-beamshaper element (Fig. 2, elements 4 and 5a). It is noted that for these claims, Applicant's interpretation of a

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beamshaper (Page 7, lines 1-8 of Remarks filed July 26, 2004) is relied upon to define a non-beamshaper element.

*Allowable Subject Matter*

2. Claims 1-3, 8, 11 and 12 are allowable over the prior art of record. Claims 1-3 are allowable for the previously specified reason. Claims 8, 11 and 12 are allowable for the reasons specified in Applicant's Remarks filed August 4, 2005 and March 18, 2005.

*Response to Arguments*

3. Applicant's arguments filed August 4, 2005 have been fully considered but they are not persuasive because they are not directed towards the claim limitations of claims 16, 19 and 20, which do not include a "farthest virtual source point." No arguments point out how the language of claims 16, 19 and 20 patentably distinguishes them from the references used in the rejections (Shimano in view of Ngoi).

*Conclusion*

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

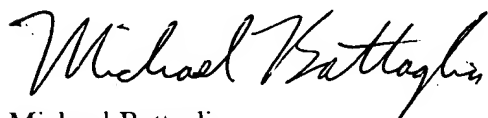
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

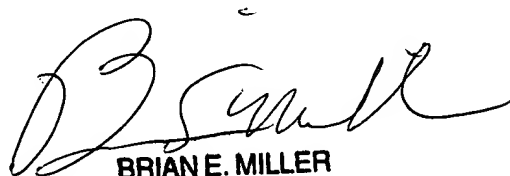
CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V. Battaglia whose telephone number is (571) 272-7568. The examiner can normally be reached on 5-4/9 Plan with 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Michael Battaglia

  
BRIAN E. MILLER  
PRIMARY EXAMINER